ing flimsy, the typography bad, the cuts miserable.

The reviewer is not suffering from either indigestion or disordered liver, and on taking second thought is convinced that the above estimate is not undeservedly harsh.

JOSEPH W. RICHARDS.

Histoire de l'habillement et de la parure. By L. BOURDEAU. 1 vol. 8vo. Bibliothèque scientifique internationale. Paris, Felix Alcan. Pp. 300. 6 francs.

This volume completes a series of culture-historical studies by the author: The forces of industry, the history of alimentation, the conquest of the animal kingdom, the conquest of the vegetal kingdom, and history of dress and adornment. Three motives are urged as having given rise to vestment—protection from injury caused by the things that are without, the love of pleasure and modesty. The male sex and the female have vied with each other in the elaboration of innumerable inventions in this category. Animals have clothing provided by nature—carapaces, shells, hair, bristles, feathers, down, wool and more. Man's skin, on the contrary, is a tissue of sensation structures, putting him into lively contact and communication with the outside world, but shielding him little.

The unfolding of this story is divided into two parts: (1) the materials—skins and textile substances and their preparations, and (2) the history of costume. The substances fit for clothing are not innumerable. They had to be bad conductors of heat from the body and to the body; they had to be pliable, fitting themselves to the form, tough enough to wear and last and pay for the time spent in manufacturing them. The story begins with skins and passes on through animal textiles, vegetal textiles and other substances, from which must not be omitted the great variety of things ornamental. Add to all this the fashions in tissues, the dyeing, staining, painting, bleaching, printing of patterns on goods, cutting out, sewing and trimming, and it will appear what a large fraction of human hours are given to raiment. The making of buttons requires the services of 30,000 workmen and an outlay of 30,000,000 francs (1900).

The development of costume fills the last one hundred pages, its general evolution, the special history of modern costume, head dresses, foot gear and gloves, accessories of costume, such as handkerchiefs, fans, parasols, umbrellas and jewelry. There is a chapter (pp. 124–147) on artificial coloring of the hair and skin, tattooing, painting and dyeing. And the goodly friend of the species, soap, together with perfumeries, baths, etc., is not neglected. It is a great pity that there is no index to the work, for there is an infinite amount of petty detail gathered here, to which one would like to refer. The author assumes the existence of naked and unadorned peoples. When you go to look for them, they are seldom to be found, which leads to the inquiry whether really there are any such. O. T. M.

SCIENTIFIC JOURNALS AND ARTICLES.

The Journal of the American Chemical Society for November contains the following articles:

ROY D. HALL and EDGAR E. SMITH: 'Some Observations on Columbium.'

JOSEPH H. GOODWIN: 'Electrolytic Calcium.'

GEO. A. HULETT: 'Preparation of Nitrogen from the Atmosphere.'

H. M. GORDIN: 'On the Crystalline Alkaloid of Calycanthus Glaucus.'

WILLIAM A. NOYES and HOWARD W. DOUGHTY: 'Derivatives of Trimethylparaconic and of Camphoronic Acids.'

EDWARD GUDEMAN: 'Artificial Digestion Experiments.'

A. T. LINCOLN: 'A New Burette Holder.'

Review of American Chemical Research.

The Museum News, of the Brooklyn Institute, for November may be termed a zoological number, as it is principally devoted to notes pertaining to that branch of science. There is a little leader in the matter of labels, which explains why labels are frequently absent, and also gives the point of view of the curator. The completion of a group of fur seals is announced which has been in preparation for some time, and is the finest of its kind in any museum, comprising as it does thirteen speci-

mens, representing the various classes of this valuable animal. The leading article in the Children's Museum section is a sketch of 'King Cole,' a live crow, which was for some time an object of interest in the museum. Lecture courses are announced for both museums.

SOCIETIES AND ACADEMIES.

THE ELISHA MITCHELL SCIENTIFIC SOCIETY OF THE UNIVERSITY OF NORTH CAROLINA.

THE 161st meeting of the society was held in the chemical lecture room on Tuesday (7:30 P.M.), October 17, 1905. The following papers were presented:

PROFESSOR H. V. WILSON: 'On the Formation of Regenerative Bodies of Sponges when kept in Confinement.'

PROFESSOR A. S. WHEELER: 'Paper Making.'

ALVIN S. WHEELER,
Recording Secretary.

DISCUSSION AND CORRESPONDENCE.

MUSICAL INSTRUMENTS OF MALAYSIA AND THE WEST COAST OF AMERICA.

TO THE EDITOR OF SCIENCE: A short time ago the National Museum received from Mr. C. Boden Kloss, curator of the Johore Museum, No. 40 of the *Journal of the Straits Branch of the Royal Asiatic Society,* for June, 1904, containing an illustrated catalogue of the ethnographical collection of the Sarawak Museum, Part I., Musical Instruments, by R. Shelford.

On page 29, Mr. Shelford thus describes a flageolet of the tribe called Murut, in Borneo:

a. Murut—Flageolet. (Plate VIII., figs. 7 and 8.)

Distal end open and cut square, proximal end closed by the natural septum, the bamboo has not been cut flush with this but projects considerably beyond it; in the wall of this projecting part a small hole is bored quite close to the septum, and a groove runs on the outside of the flute from this hole to the sound-hole, the groove being covered by a slip of bamboo luted on with dammar. The edge of the sound-hole is sharpened by a piece of palm-leaf stuck on. The sound-hole is 5 centim. from the proximal end; there are two stops 8.5 centim. apart, bored with a red-hot iron in a flattened strip on the same side as the sound-hole, the upper one is 32 centim. from the sound-hole. Total length 52.5 cm.; diam. 2.5 cm.

Catalogue No. 1291. F. J. D. Cox, Esq. (P. viii 03). From the Trusan river.

This is precisely similar to the mystery flute of some of the early writings about the North American Indians. The Museum has just received an additional example from Arizona, through E. H. Nelson. They are usually made of cane, having a closed joint at or near the middle. A hole is pierced on either side of the septum of the joint through the walls of the cane and an air channel cut on the outside from one hole to the other. If the upper hole and the channel are covered by a bandage or the finger as far as the lower face of the septum and the upper tube blown into, it gives a whistling sound. In the lower section three or four finger holes are made. If more than that number, it shows a European influence. If an instrument of this kind that has no bandage is handed to one ignorant of its characteristics, he would not be apt to place a finger in the precise spot required to make a sound, and how to sound it would be a mystery to him. Some of the North American Indians construct bone whistles in the same manner. For the reason that this method of construction is seldom seen elsewhere, the instrument is supposed to have been original with the Indians of North America.[1]

This is another interesting connecting link between Malaysia and the west coast of America, because of these two identical instruments in regions far apart. A search for the cause of this identity will be interesting to ethnologists.

E. H. HAWLEY.

THE BUREAU OF SOILS.

TO THE EDITOR OF SCIENCE: Mr. F. H. King, in the last number of SCIENCE, reviewing the work done by Dr. Buckingham and published by the Department of Agriculture, makes use of the following expression:

He is well aware too that my object in having him called to the bureau was that he might make

[1] See George Catlin Indian Gallery, Smithsonian Report, 1885, p. 395 and Plate 93 g.